

Title (en)  
METHODS FOR DETERMINING DETECTOR GAIN IN A FLOW CYTOMETER

Title (de)  
VERFAHREN ZUR BESTIMMUNG DER DETEKTORVERSTÄRKUNG IN EINEM DURCHFLUSSZYTOMETER

Title (fr)  
PROCÉDÉS POUR DÉTERMINER UN GAIN DE DÉTECTEUR DANS UN CYTOMÈTRE DE FLUX

Publication  
**EP 4147028 A4 20231108 (EN)**

Application  
**EP 21799576 A 20210408**

Priority  
• US 202063020367 P 20200505  
• US 2021026338 W 20210408

Abstract (en)  
[origin: US2021349005A1] Aspects of the present disclosure include methods for adjusting sensitivity of a photodiode in a light detection system. Methods according to certain embodiments include determining a background data signal from a photodetector at a plurality of detector gains, irradiating the photodetector with a light source at a plurality of different light intensities, generating data signals from the photodetector for the plurality of light intensities at each detector gain and adjusting the photodetector to the detector gain that corresponds to the lowest light irradiation intensity that generates a data signal resolvable from the background data signal. Systems (e.g., particle analyzers) having a light source and a light detection system that includes a photodetector for practicing the subject methods are also described. Non-transitory computer readable storage medium are also provided.

IPC 8 full level  
**G01N 15/14** (2006.01)

CPC (source: EP US)  
**G01J 1/08** (2013.01 - US); **G01N 15/1012** (2013.01 - US); **G01N 15/1425** (2013.01 - EP US); **G01N 15/1429** (2013.01 - EP US); **G01N 15/1459** (2013.01 - EP US); **G01N 15/149** (2024.01 - EP US); **G01N 2015/1402** (2013.01 - EP US)

Citation (search report)  
• [E] WO 2021188435 A1 20210923 - BECTON DICKINSON CO [US]  
• [X1] US 2007178480 A1 20070802 - CORSON JOHN F [US], et al  
• [A] CHRISTOPHER "KIT" SNOW: "Flow cytometer electronics", CYTOMETRY A, WILEY-LISS, HOBOKEN, USA, no. 2, 22 January 2004 (2004-01-22), pages 63 - 69, XP072330987, ISSN: 1552-4922, DOI: 10.1002/CYTO.A.10120  
• [A] HOLDEN T. MAECKER ET AL: "Flow cytometry controls, instrument setup, and the determination of positivity", CYTOMETRY PART A, vol. 69A, no. 9, September 2006 (2006-09-01), pages 1037 - 1042, XP055209625, ISSN: 1552-4922, DOI: 10.1002/cyto.a.20333  
• See also references of WO 2021225736A1

Designated contracting state (EPC)  
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)  
**US 11781964 B2 20231010; US 2021349005 A1 20211111**; CN 115917315 A 20230404; EP 4147028 A1 20230315; EP 4147028 A4 20231108; WO 2021225736 A1 20211111

DOCDB simple family (application)  
**US 202117225347 A 20210408**; CN 202180047574 A 20210408; EP 21799576 A 20210408; US 2021026338 W 20210408